

ABSTRAK

Sungai Batang hari merupakan salah satu sungai terpanjang di Pulau Sumatera yang terletak di Provinsi Jambi dan Sumatera Barat. Perkembangan lalu lintas perdagangan dan bertambahnya arus transportasi maka dilakukan usaha pengembangan fasilitas- fasilitas khususnya yang berkaitan dengan pembangunan *Breasting Dolphin dan Mooring Dolphin* yang direncanakan di lokasi Survey Batimetri ini. Dalam hal ini dilakukan analisis pengukuran batimetri dan pengamatan pasang surut di Sungai Batang hari untuk menentukan kedalaman secara berkala.

Data pasang surut selama 5 piantan dianalisis dengan metode *admiralty* dan pengukuran kedalaman sungai yang ditentukan berdasarkan *draft* (sarat kapal) kapal maksimum yang direncanakan. Kedua data tersebut akan dikombinasikan terhadap ruang kebebasan bruto sebesar 7% dari *draft* maksimum. Dengan memperhitungkan gerak osilasi kapal karena pengaruh alam seperti gelombang, angin, dan pasang surut; kedalaman sungai batang hari adalah 1,1 kali *draft* kapal pada muatan penuh di bawah elevasi muka air rencana.

Dasar sungai batang hari, rata-rata bermorfologi *flat to almost flat* (rata/ hampir rata) dengan nilai kelerengan berkisar 1,278-1,547 % serta memiliki kedalaman 2,980-20,06 m. Sedangkan tipe pasang surut sungai batang hari adalah pasang surut harian tunggal (*diurnal tide*); dengan nilai datum yang didapat sebagai berikut: MSL 2,19 m, LLWL -0,22 m, HHWL 9,06 m, dan Z0 5.43 m dengan nilai FORMZAHL 1,55 M.

Dimana data karakteristik kapal telah ditentukan dari pihak PT. MITRA ANUGERAH PELABUHAN yang diizinkan bersandar *didolphin* yang telah direncanakan perusahaan tersebut. Kemudian berdasarkan data batimetri yang telah dikoreksi pasang surut data kedalaman sungai batang Hari yang berada di bawah 3 m; harus dilakukan pengerukan.

Kata Kunci: batimetri, pasang surut, *admiralty*

ABSTRACT

The Batang Hari River is one of the longest rivers on the island of Sumatra, which is located in the provinces of Jambi and West Sumatra. Due to the development of trade traffic and the increase in transportation flows, efforts are made to develop facilities, especially those related to the construction of the Breasting Dolphin and Mooring Dolphin, which are planned at the location of this Bathymetry Survey. In this case, analysis of bathymetry measurements and observations of tides in the Batang Hari River were carried out to determine the depth on a regular basis.

Tidal data for 5 piantans were analyzed using the admiralty method and the measurement of river depth was determined based on the maximum planned ship draft. The two data will be combined against a gross freedom space of 7% of the maximum draft. By taking into account the ship's oscillating motion due to natural influences such as waves, wind, and tides; the depth of the Batang Hari River is 1.1 times the draft of the ship at full load below the design water level.

The bottom of the Batang Hari river has a morphology of flat to almost flat with slope values ranging from 1.278-1.547% and has a depth of 2,980-20.06 m. While the tidal type of Batang Hari River is a single daily tide (diurnal tide); with the datum values obtained as follows: MSL 2.19 m, LLWL -0.22 m, HHWL 9.06 m, and Z0 5.43 m with FORMZAHL 1.55 M.

Where the ship characteristics data has been determined from the PT. ANUGERAH PORT PARTNERS who are allowed to rely on the dolphins that have been planned by the company. Then based on bathymetry data that has been corrected for tides, the data for the Batang Hari river depth is below 3 m; dredging must be done.

Keywords: bathymetry, tides, admiralty